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(51) INT CL³
G09F 7/18

(52) Domestic classification
G5C ER

(56) Documents cited
GB A 2112988
GB 0633532
GB 0747770

(58) Field of search
G5C

(54) Floor sign extension attachment

(57) A sign extension attachment for a self-standing floor sign having two panels 28 and 29 connected at their upper ends by hinge means 30 including a transverse handle 31 comprises a panel 10 having spreadable sleeve portions 18 and 22 for wrapping around the handle, the portion 22 being hinged at 23 and attachable to the portion 18 by barbs 24. The panel 10 is locked in its display position by yieldable tongues 26 which snap behind the edges of legs 29*a*.

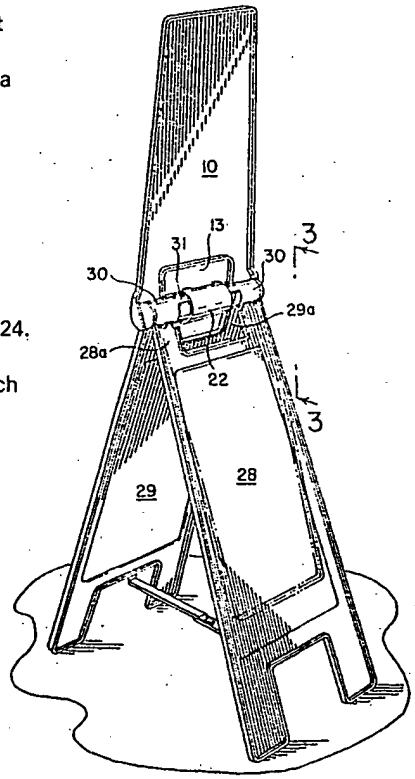

FIG. 1

FIG. 9

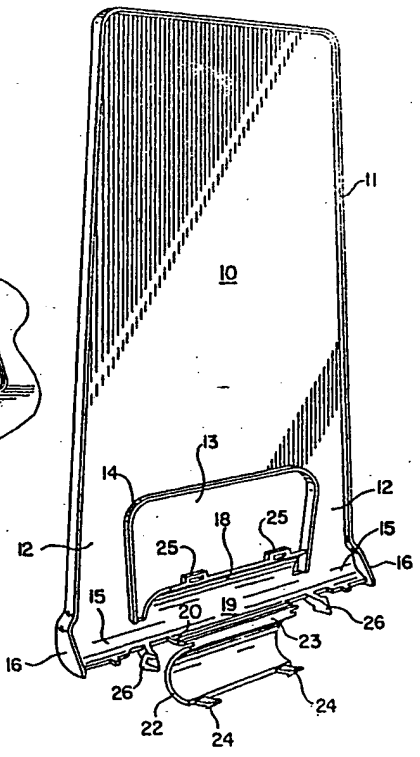

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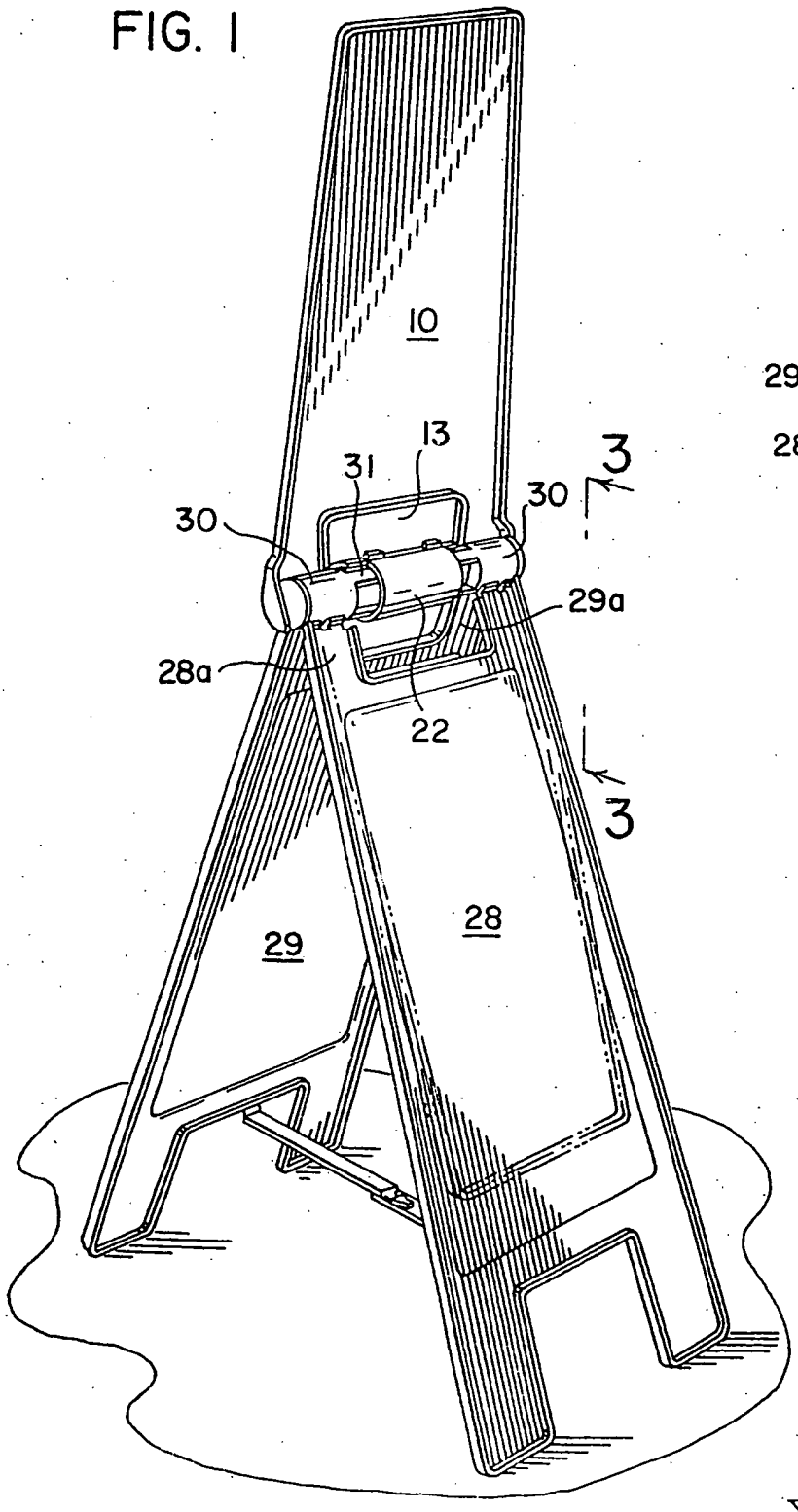
FIG. 1



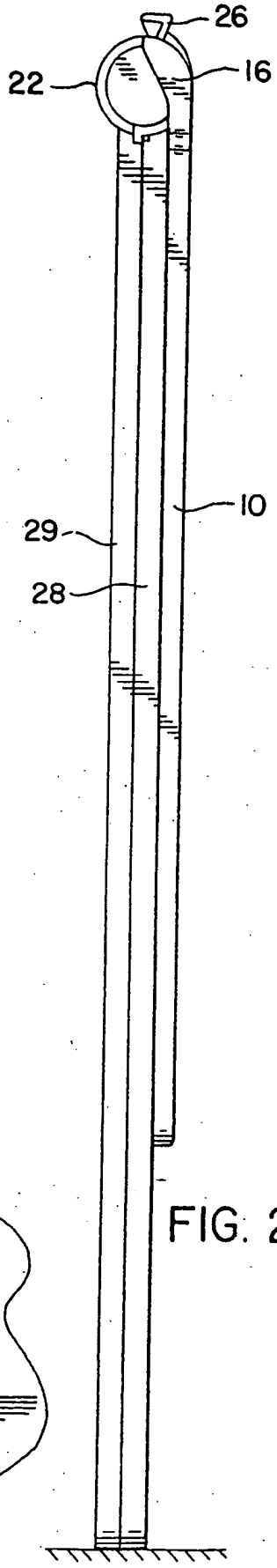
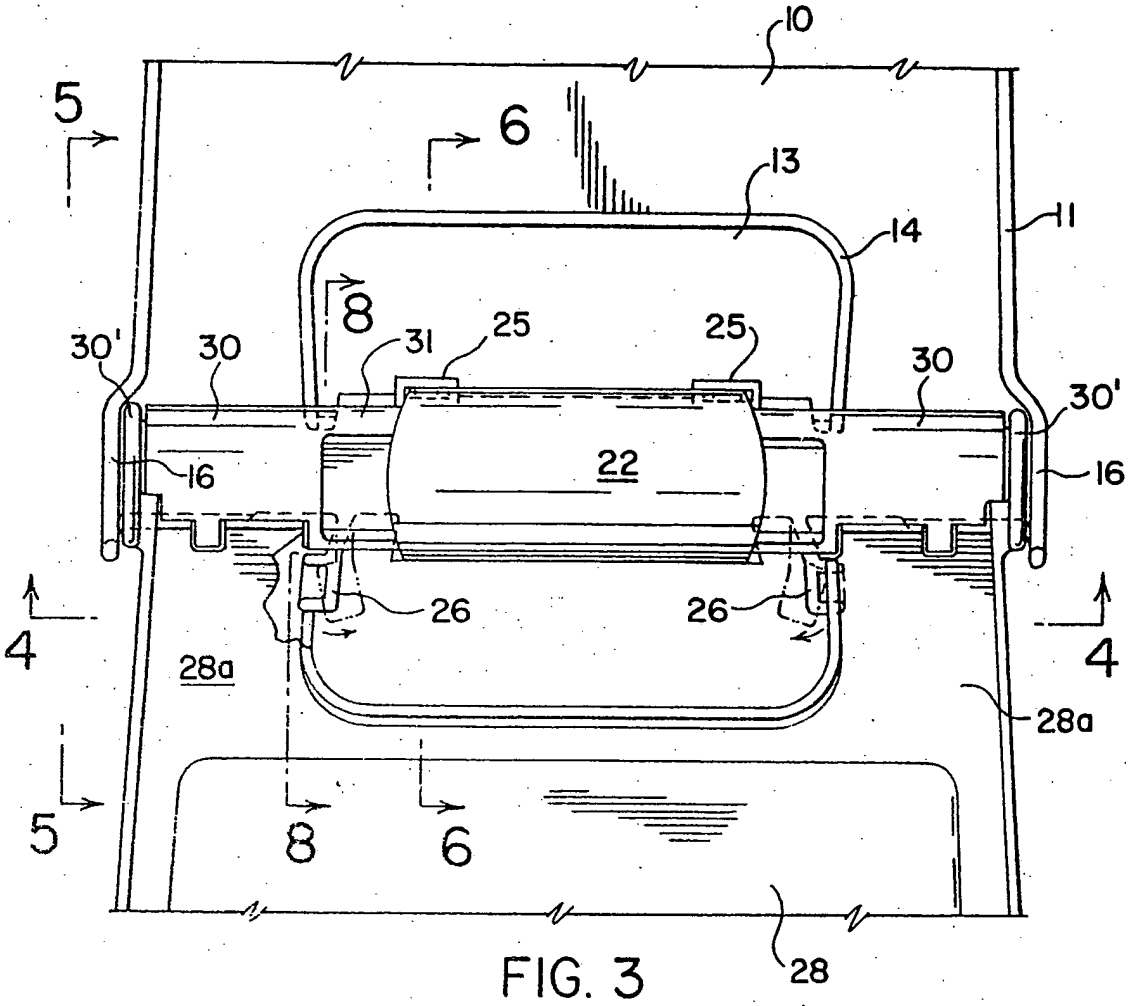


FIG. 2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30'
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31
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25
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FIG. 3

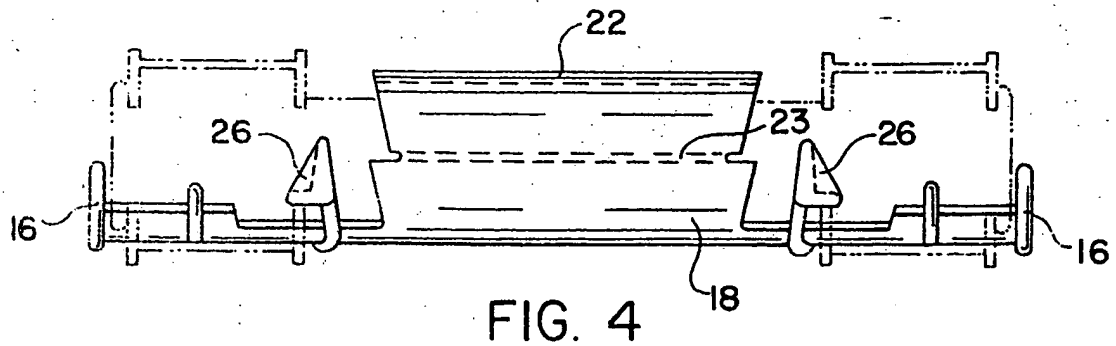
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FIG. 4

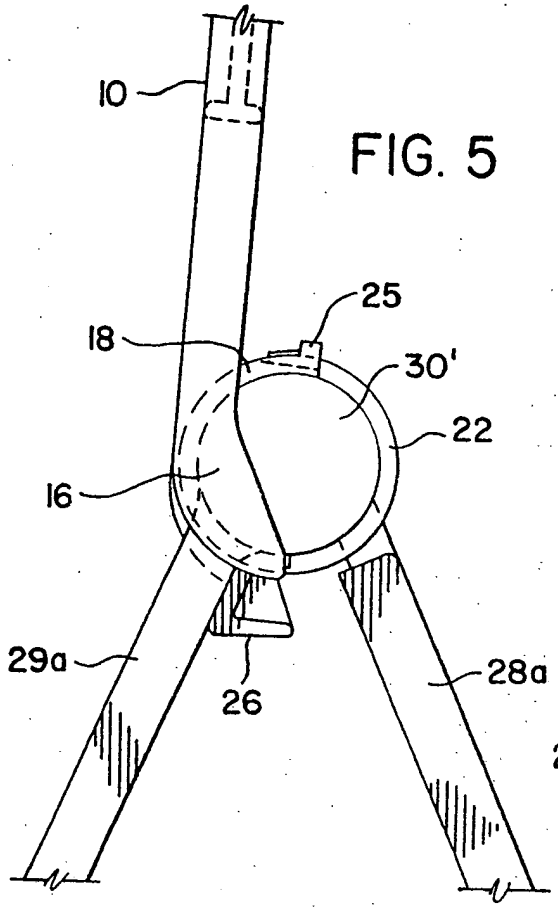

FIG. 5

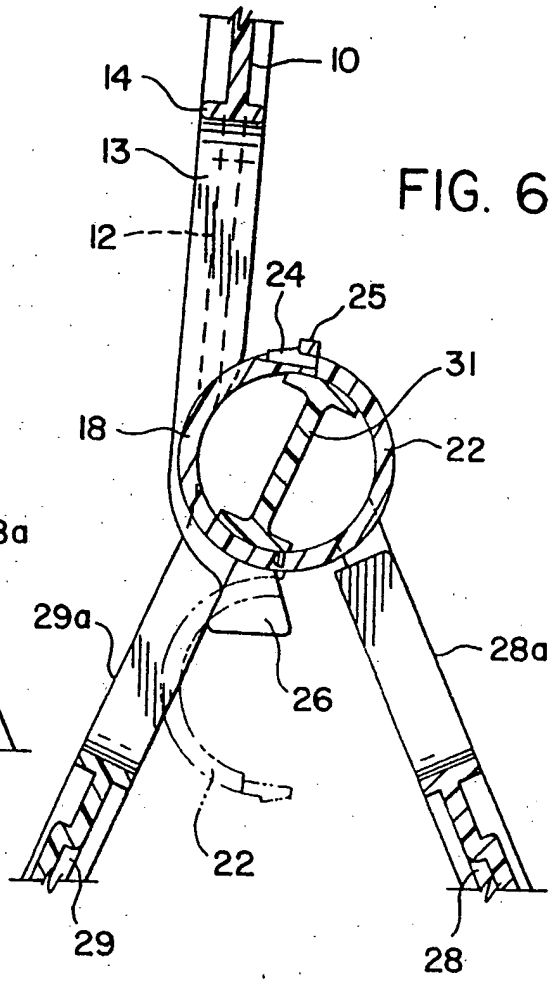

FIG. 6

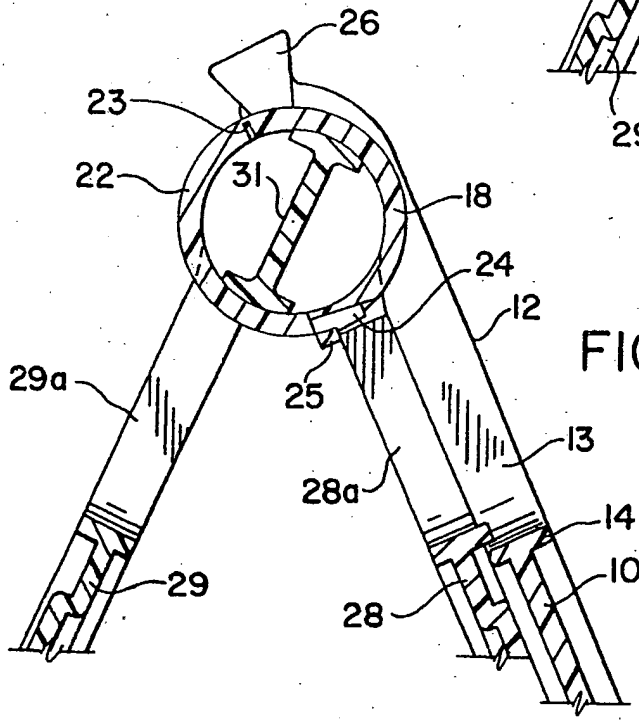

FIG. 7

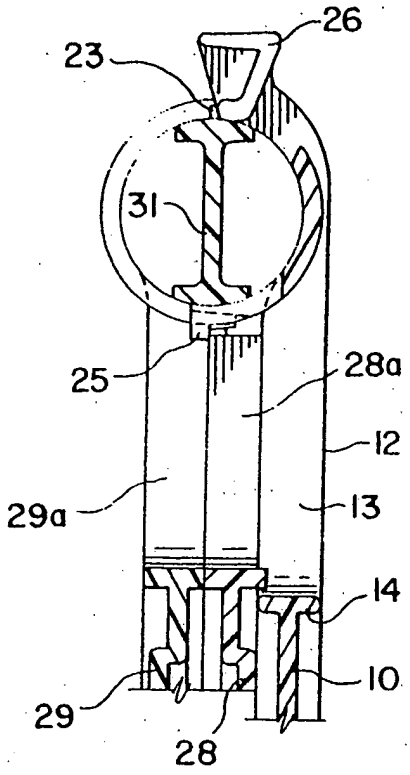
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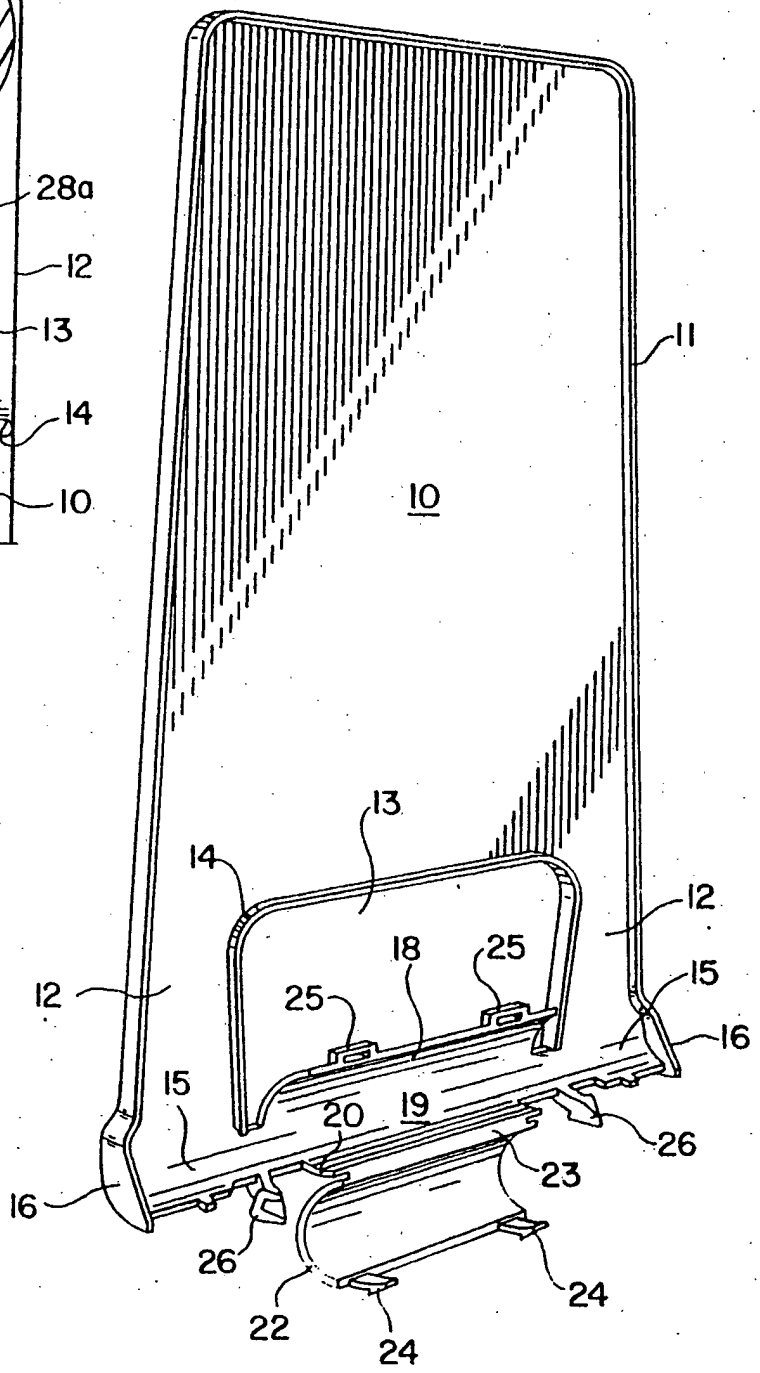
FIG. 8

FIG. 9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SPECIFICATION

Floor sign extension attachment

Technical field

The invention relates to self-standing floor signs used on wet or newly waxed or painted floors to warn or caution pedestrians traversing the floors of the surface conditions.

Background art

Prior U.S. Patent No. 4,253,260 shows a self-standing floor sign having two plastic panels hinged together at their upper ends for selective folding or spreading the panels apart at their lower ends to a triangular self-standing position. The upper ends of the panels are provided with laterally spaced legs forming a central slot therebetween and the legs have interconnected hing portions with a cross bar handle extending between and connecting the hinge portions.

The warning or cautionary signs normally placed upon the panels are visible close up but not at some distance due to their insubstantial height above the floor, especially if some obstruction bars the view. Consequently, pedestrians may often tread upon the floor before seeing the warning sign.

Disclosure of the invention

The novel and improved attachment disclosed and described herein has a sign panel designed and adapted to be detachably mounted on the upper handle portion of a self-standing floor sign for extending upright therefrom or folding down against one of the lower panels of the sign.

It is an object of the present invention to provide an improved sign extension adapted to be quickly attached to and detached from a cross bar handle connecting laterally spaced hinged leg portions at the upper ends of hinged floor sign panels.

Another object is to provide an improved sign extension having novel releasable attaching means for encircling said cross bar handle.

A further object is to provide an improved sign extension having novel attaching means pivotally encircling the cross bar handle of a floor sign to allow folding the extension flat against one of the lower sign panels.

A still further object is to provide an improved sign extension having improved means for yieldably abutting the laterally spaced leg portions of one of the lower sign panels to maintain the sign extension in upright position.

Still another object is to provide an improved sign extension accomplishing all of the foregoing objects and constructed entirely of plastic material.

These and other objects are accomplished by the improvements comprising the present invention, a preferred embodiment of which is illustrated and described herein as exemplifying the best known mode of carrying out the invention. Various modifications and changes in details of construction are comprehended within the scope of the appended claims.

Brief description of the drawings

Figure 1 is a front perspective view of a floor sign with the improved attachment mounted thereon in extended position.

Figure 2 is a side elevation showing the sign folded and the attachment folded down against the front sign panel.

Figure 3 is an enlarged partial front elevation showing the connection between the attachment in extended position and the floor sign.

Figure 4 is an elevation on line 4-4 of Figure 3, showing the handle portion of the sign in phantom.

Figure 5 is a side elevation on line 5-5 of Figure 3.

Figure 6 is a cross section on line 6-6 of Figure 3.

Figure 7 is a similar view showing the attachment folded down against the front panel of the floor sign.

Figure 8 is a cross section on line 8-8 of Figure 3.

Figure 9 is a detached perspective view of the attachment with the mounting portion open.

Preferred embodiment of the invention

Referring first to Figure 9, the improved attachment comprises a substantially rectangular panel portion 10 with a peripheral flange 11 extending around two sides and one end. At the other end, panel 10 has laterally spaced leg portions 12 forming a substantially rectangular opening 13 preferably having a peripheral flange 14 around its upper and side edges. The leg portions 12 terminate in curved surfaces 15 and the side portions of peripheral flange 11 terminate in enlarged flange portions 16 defining the ends of the curved leg surfaces.

At the lower edge of opening 13 an upwardly curved attaching wing 18 is formed, and its inner curved surface merges into the curved surface 19 which connects the curved surfaces 15 of the legs 12. At the lower edge of the curved surface 19, a curved flange 20 is projected and forms with the wing 18 and surface 19 a semi-cylindric mounting sleeve.

A lower semi-cylindric mounting sleeve or wing 22 is hinged to the outer edge of flange 20 by means of a thin web 23. The material of which the improved attachment is formed is preferably polypropylene which has the well-known property of providing in thin section a flexible so-called "living hinge" which lasts for an indefinite period of time. The lower edge of sleeve 22 is provided with barbed tabs 24 which are adapted to be inserted and locked into slotted ears 25 on the upper edge of wing 18. Laterally spaced from the flange 20 are laterally yieldable barbed tongues 26, the purose of which will be decribed.

Referring to Figures 1 and 3, the floor sign on which the improved attachment is mounted has front and rear panels 28 and 29 with upper laterally spaced leg portions 28a and 29a having tubular hinge portions 30 connecting their upper ends. A transverse handle bar 31 connects the hinge portions 30, and the bar 31 preferably has an I beam cross section. The enlarged flange portions 16 at the bottom of panel 10 are outwardly offset to enclose the end caps 30'on hinge portions 30. The construction and operation of the hinge connection between the panels 28 and 29 is set forth in U.S. Patent No. 4,253,260, previously referred to under "Background

Art" herein.

As indicated in Figures 5-8, the improved extension panel 10 is mounted on the top of the floor sign by wrapping the sleeve portions 18 and 22 around the transverse handle 31 and inserting the barbed tabs 24 into the slotted ears 25. As the extension panel 10 is manually swung upwardly from the folded position of Figure 7 to the upwardly extended position of Figures 5 and 6, the barbed tongues 26 yield laterally inward as they pass through the openings between the legs 29a of the floor sign and then snap behind the edges of the legs to lock the extension against return movement clockwise as viewed in Figures 3, 5 and 6. Further upward or counter clockwise movement is prevented by abutment of the bottom edge portion of panel 10 with the top portion of the floor sign. In order to fold the extension panel downward to the position of Figure 7, the tongues 26 are first manually squeezed inwardly to pass the legs 29a and the extension is then free to swing downwardly to the folded position of Figure 7.

Accordingly, the extension panel 10 may be stored folded or extended upwardly as desired, and when the panels of the floor sign are folded together with the extension panel also folded a very compact package is provided when not in use. Obviously, the extension panel may bear suitable warning insignia on both sides at a height which is visible at increased distances and above common obstructions, and when folded it functions the same as floor signs of conventional height.

The improved attachment is made entirely of plastic material which will not rust or dent and is quickly attached to or detached from the upper hinge portion of a self-standing floor sign without the use of tools.

CLAIMS

1. A sign extension attachment for a self-standing floor sign having two panels hingably connected at their upper ends by hinge means including a transverse handle, said attachment comprising an extension panel having means at one end for pivotal connection to said handle for swinging said extension panel from an upright position downwardly to lie flat against one of said floor sign panels.

2. A sign extension attachment for a self-standing floor sign as described in claim 1, wherein said extension panel has yieldable means for engaging one of said floor sign panels to hold said extension panel in upright position.

3. A sign extension attachment for a self-standing floor sign as described in claim 2, wherein said sign extension attachment and handle connection means are constructed entirely of plastic material.

4. A sign extension attachment for a self-standing floor sign as described in claim 1, wherein said self-standing floor sign panels have laterally spaced upper legs hinged together and connected by said transverse handle, and said extension panel has yieldable means for engaging the legs on one of said floor sign panels to hold said sign extension panel in upright position.

5. A sign extension attachment for a self-standing floor sign as described in claim 4, wherein said extension panel means for pivotal connection to said handle comprise spreadable half sleeve portions hinged at one edge for encircling said handle, and means for detachably connecting said sleeve portions together in closed position encircling the handle.

6. A sign extension attachment for a self-standing floor sign as described in claim 1, wherein said extension panel means for pivotal connection to said handle comprise spreadable half sleeve portions hinged at one edge for encircling said handle, and means for detachably connecting said sleeve portions together in closed position encircling the handle.

7. A sign extension attachment for a self-standing floor sign as described in claim 6, wherein said extension panel has yieldable means for engaging one of said floor sign panels to hold said extension panel in upright position.

8. A sign extension attachment for a self-standing floor sign as described in claim 7, wherein said sign extension attachment and handle connection means are constructed entirely of plastic material.

9. A sign extension attachment for a self-standing floor sign as described in claim 6, wherein said half sleeve portions are hinged together at one end by means of an integral flexible web comprising a living hinge.

10. A sign extension attachment for a self-standing floor sign as described in claim 9, wherein said extension panel has yieldable means for engaging one of said floor sign panels to hold said extension panel in upright position.

11. A sign extension attachment for a self-standing floor sign substantially as herein described with reference to the accompanying drawings.

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